

John M. Dewey, et al. vs. Volkswagen of America, Inc., et al.

Expert Report of Janusz A. Ordover

June 10, 2010

I. QUALIFICATIONS

1. My name is Janusz A. Ordover. I am Professor of Economics and former Director of the Masters in Economics Program at New York University, where I have taught since 1973. During 1991-92, I served as Deputy Assistant Attorney General for Economics at the Antitrust Division of the United States Department of Justice. As the chief economist for the Antitrust Division, I was responsible for formulating and implementing the economic aspects of antitrust policy and enforcement in the United States, including co-drafting the 1992 U.S. Department of Justice and the Federal Trade Commission Horizontal Merger Guidelines. I also had ultimate responsibility for all of the economic analyses conducted by the Department of Justice in connection with its antitrust investigations and litigation.

2. My main areas of specialization include industrial organization economics, antitrust, and regulation economics. I serve on the Board of Editors of Antitrust Report and have served as an advisor on antitrust and regulatory issues to many organizations, including the American Bar Association, the World Bank, the Organization for Economic Cooperation and Development, the Inter-American Development Bank, and the governments of Poland, Hungary, Russia, the Czech Republic, Australia, and other countries. I have provided economic testimony in policy hearings conducted by the Federal Trade Commission and the United States Senate. My curriculum vita, which contains a complete list of my publications, is attached as Exhibit 1.

II. INTRODUCTION AND SUMMARY OF CONCLUSIONS

3. Plaintiffs in this litigation allege that certain defects in various models and model years (“MY”) of Volkswagen and Audi vehicles lead to an increased likelihood of water ingress that could damage the vehicles.¹ Plaintiffs and Volkswagen of America, Inc. (“Volkswagen”) entered into the Settlement Agreement that provides various benefits for class members, including:²

- Educational preventative maintenance information for all class members
- Service actions for present and former owners/lessees of Volkswagen New Beetle, MY 2001-07; Golf and GTI, MY 2001-08; Jetta A4 sedans or wagons, MY 2001-05; Volkswagen Passat, MY 1999-2005; Jetta A5, MY 2005-07; Golf and GTI A5, MY 2006-07; Audi A4 (B5 and B6) , MY 1997-2006; and Audi A6, MY 1998-2005
- Reimbursement fund for prior damage for owners/lessees of Passat, MY 1999-2005; Audi A4 (B5 and B6 platforms), MY 1997-2006; and Audi A6 (C5 platform, including Cabrio, S and RS versions).

4. On June 2, 2010, Dr. George C. Eads produced an expert report (“Eads Report”), in which he provides disaggregated valuations of the various benefits of the settlement to class members. Dr. Eads divides the benefits to the class into four broad categories and calculates, for each of the seven vehicle “Subclasses” he identifies, the total value of each benefit category. Dr. Eads then provides an estimate of the total value of the settlement by simply adding up his estimates across all Subclasses and all benefit categories.³ Dr. Eads’ valuation categories are as follows.⁴

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1. *John M. Dewey, et al. vs. Volkswagen Aktiengesellschaft, et al.*, Fourth Amended Class Action Complaint, Filed 07/30/2008, pp. 3-5.
 2. *John M. Dewey, et al. vs. Volkswagen Aktiengesellschaft, et al.*, Amended and Superseding Agreement of Settlement (“Settlement Agreement”)
 3. It is not clear whether Dr. Eads’ opinion is that the total value of the settlement is

Actual and potential reimbursements for claims up to Dec 2009: ⁵	\$9.5 m
Service actions to remedy certain alleged defects: ⁶	\$55.3 m
Avoided future repair costs: ⁷	\$37.6 m
Avoided diminution in future value: ⁸	\$39.8 m
Total: ⁹	\$141.8 m

B. Assignment

5. I have been asked by counsel for Volkswagen to review the Eads Report and to comment on the bases and conclusions of his analysis regarding the value of the settlement to members of the class. I have also been asked to review the Report of Richard Hixenbaugh, plaintiffs' expert who estimates the impact of water damage on

actually the sum of all benefit categories. He describes this total as "the total value of benefits available to class members under terms of the settlement." I address at some length the double-counting flaws in Dr. Eads' "adding up" step in Sections III and IV.

4. There are some apparent typographic errors in the totals reported at the conclusion of the Eads Report. I provide the figures rounded to the nearest hundred thousand dollars. The attached tables report the unrounded figures.
5. See Eads Report, Table 2, (p.11). The \$9.5 million figure is obtained from the total value of reimbursements for past claims that Dr. Eads provides, including \$1.5 million estimated for Subclasses 1 and 2, and capping reimbursements for Subclasses 3 - 6 at \$8 million, based on terms of the Settlement Agreement. There is no provision in the Settlement Agreement for reimbursement for Subclass 7.
6. See Eads Report, Table 3 (p. 13).
7. See Eads Report, Table 1 (p. 9).
8. See Eads Report, Table 5 (p. 15).
9. The actual total for these figures is \$142,120,207. Dr. Eads reports a total of \$141,820,208. I assume the difference is due to typographical errors. For purposes of this report, I will use the rounded figure of \$142 million to represent Dr. Eads estimate of the total value of the settlement.

vehicle values (“Hixenbaugh Report”), but only to the extent that it provides materials on which Dr. Eads relies. I received the Eads Report and the Hixenbaugh Report on June 2, 2010, and a complete set of Dr. Eads’ work product on June 4, 2010. Accordingly, my evaluation of the details of his calculations is ongoing. Nevertheless, I have a number of criticisms of the economic bases for his valuation estimates.

B. Summary of Flaws in Dr. Eads’ Conclusions

6. My overarching criticism of Dr. Eads’ analysis is that valuing the settlement at \$142 million significantly overstates its economic value to class members because in arriving at this figure, Dr. Eads double-counts various individual components of his valuation of the benefits from the settlement. The primary double-counting error is that he starts by first estimating certain settlement benefits to the class members by assessing the amount Volkswagen will pay to fund preventative actions. He then estimates the value of these same benefits by calculating the net present value of the future benefits from the settlement. Stated differently, he calculates what I term the “up-front” value of the benefits (*i.e.*, the direct cost of preventative actions that is being paid by Volkswagen on behalf of the class members) and he calculates the avoided losses to class members resulting from Volkswagen’s preventative actions. Dr. Eads then adds these two estimates together. Clearly, the benefit from the settlement cannot be valued as the sum of those two estimates since these are the estimates of the same benefit but derived in two different ways. In theory, these should be equal. If they are not, only the lower estimate should be properly used.

7. This error stems from the basic economic proposition that an asset (in this case the settlement benefits available to class members) can be valued at its up-front cost

or as the present value of expect future benefits from owning the asset to class members, but not as the sum of the two. I discuss this issue in Section III of this report.

8. In addition to my overarching criticism regarding double-counting of up-front benefits and avoided losses from preventative actions, my conclusions can be summarized as follows:

- Dr. Eads fails to establish that avoided future repair costs and avoided diminution in value are not double counted, which – if they were – would lead to an additional overstatement of the benefits of the settlement. This double-counting stems from Dr. Eads’ and Mr. Hixenbaugh’s unsupported assumption that repairs to vehicles for water damage do not mitigate in any way the diminution in value that they believe arises from water ingress.
- Assuming that Dr. Eads’ estimates of the value of the settlement of each of the components are correct, the economically sound total valuation that avoids double counting leads to a total estimate of the value of the settlement of approximately \$47.1 million, based on the value of future benefits, or approximately \$64.8 million, based on the value of Volkswagen’s up-front costs.¹⁰
- Dr. Eads makes a number of assumptions in his calculations that appear to be unlikely and thus potentially lead to overestimates of certain components of his valuation. There are, furthermore, some potential errors in his calculations, but I have not vetted them yet fully.¹¹ One such error is the assumption that the take up rate for the settlement’s service actions and educational material is 100 percent. Data from past service actions indicates that a reasonable estimate for the take up rate is 72.1 percent. Applying this correction to Dr. Eads’ valuation figures changes the estimated valuation \$36.6 million, based on the value of future benefits, or approximately \$49.4 million, based on the value of Volkswagen’s up-front costs.¹²

10. These figures include Volkswagen’s cost of reimbursing class members for past water ingress damage which Dr. Eads estimates to be \$9.5 million. The value of this reimbursement should be part of the total valuation regardless of whether the valuation is based on future benefits or up-front costs paid by Volkswagen.

11. I summarize my current analysis of his assumptions and potential errors in Appendix A.

12. Again, these figures include Dr. Eads’ estimate of \$9.5 million for the value of reimbursements for past water ingress damage.

- In sum, based on my current analysis, a reasonable value for Dr. Eads' valuation of the settlement is \$36.6 million or \$49.4 million, using a 72.1 percent take up rate.

9. My conclusions are based on the review of documents and data by myself and my staff at Compass Lexecon. This work is ongoing. The documents and data that we have reviewed are listed in Exhibit 2. If additional materials are made available to me, I may update or modify my conclusions.

C. Organization of the Report

10. The remainder of this report is organized as follows. In Section III, I address the issue of double counting, which I raised in the Introduction. In Section IV, I analyze Dr. Eads estimates of avoided repair costs and avoided diminution in future repair costs and address the question of whether those measures of benefits should be added together. In Section V, I address the economically appropriate method for aggregating certain elements of Dr. Eads' valuation of benefits under the assumption that his valuations of each component are calculated correctly. Section VI concludes. Appendix A contains my current listing of various assumptions and potential errors in Dr. Eads analysis that likely lead to overestimates of certain components of his valuation.

III. DR. EADS DOUBLE COUNTS THE VALUE OF THE PREVENTATIVE PROVISIONS OF THE SETTLEMENT

11. The settlement includes two types of provisions: (1) preventative measures paid for by Volkswagen that reduce the risk of future water ingress incidents; and (2) reimbursement by Volkswagen for repairs made prior to the settlement for past damage due to water ingress. The first category of provisions consists of "service actions" – inspection, cleaning and modification of vehicle drain systems – and "educational preventative maintenance information" that informs class members about maintenance

procedures that help prevent future incidents of water ingress. The preventative provisions are best characterized as “in-kind” benefits of the settlement because the class members receive a service from Volkswagen (service actions plus educational information) rather than a monetary payment. In this section, I discuss the fundamental double-counting error in Dr. Eads’ valuation of these preventative provisions, namely adding together the up-front cost to Volkswagen of providing this benefit and the expected avoided future losses as a result of the benefit.

A. Economically Appropriate Valuation Treats Up Front Value and Expected Future Benefits as Alternative Measures of the Benefit from the Settlement, Not as Components to be Added Together

12. By definition, the expected effect of the preventative measures is to prevent or reduce the risk of water ingress incidents in the class vehicles in the future. Therefore, these measures can be properly valued either in terms of their up-front cost to Volkswagen, or in terms of the expected future costs and/or losses class members avoid as a result of these preventative measures. Dr. Eads’ error is that he inappropriately values the preventative measures as the sum of both the up-front costs to Volkswagen *and* the expected value of future avoided losses.

13. Few simple examples can illustrate the double counting error. Consider valuation of a share of stock. The value of one share of stock in a publicly traded company is its market price. This is the “up-front” in the sense that this is the cost one has to incur to purchase a share stock. That value is also equal to the properly discounted value of expected future dividends per share of stock.¹³ Under Dr. Eads approach, one

13. See Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, Seventh Edition, McGraw-Hill Irwin (2003), pp. 60-61.

would incorrectly value the stock by adding its market price (*i.e.*, the direct cost) to an estimate of the expected discounted value of future dividends per share of stock. That would be double counting. Clearly, the price of the stock is the amount that an investor is willing to “pay” for the right to the future stream of earnings, properly discounted.

14. Valuation of a bond offers another simple example. Suppose that a 1-year Treasury bill that pays \$100 one year from today (in other words, has a face value of \$100.) If 1-year Treasury-bills currently yield 2 percent interest, the up-front cost of the bond would be approximately \$98.¹⁴ Hence, \$98 is the cost that a person must incur now to generate \$100 of benefit a year from now to another person, say. The bond could also be valued in terms of the present value of the future payment that it confers, which would also be \$98, assuming zero inflation. Hence, \$98 is the amount that a person (the beneficiary) would pay today to obtain \$100 in benefits a year from now. The “value” of the bond is either its up-front cost (\$98) or the present value of the future benefit it confers (\$98), but not the sum of the two (\$196.)

15. For the final example, consider valuation of insurance. Suppose one can purchase an insurance policy that covers repairs for water ingress. Suppose the premium on the policy is \$100 and also assume that the *expected* value of future repairs is \$100. The standard way to value this policy would be to use the value of the premium, or \$100.¹⁵ Alternatively, one can use the expected monetary value of the benefit from the policy, which is also \$100. However, it would be incorrect to value the insurance policy

14. This is \$100 discounted to the present at an annual interest rate of 2 percent (*i.e.*, $\$98 = \$100/(1.02)$).

15. See Tom Bakos and Kiri Parankirinathan, “The Life Settlement Market is an Opportunity,” *The Journal of Structured Finance*, Summer 2006, pp. 46-49.

as the sum of the premium and the expected value of the monetary benefit for the total of \$200.

B. For Subclasses 1, 2 and 3, Dr. Eads Incorrectly Values the Preventative Measures Provided by the Settlement as the Sum of Their Up-Front Cost to Volkswagen and the Future Benefit those Measures Confer

16. Dr. Eads double-counts the value of settlement benefits to Subclasses 1, 2 and 3, by summing the up-front cost to Volkswagen to provide the preventative measures (service actions plus educational information) and the future costs to class members that will be avoided (in expected value sense) by these preventative measures. Dr. Eads contends that for these subclasses, the service actions provided by Volkswagen convey all of the preventative benefits in the settlement.¹⁶ Therefore, the up-front cost of the service actions represents the up-front cost of all of the preventative benefits to these subclasses. According to Dr. Eads, the total up-front cost to Volkswagen of the service provided in the service actions plus educational material is \$55.3 million.¹⁷ See Table 1.

17. Dr. Eads also values the expected future costs and/or losses that he claims would be avoided as a result of these preventative actions. According to Dr. Eads, the preventative measures convey to class members with vehicles in Subclasses 1, 2 and 3 a

16. Eads Report, p. 15 (“Although all settlement class members are entitled to receive educational preventative maintenance information, I believe that only the members of Subclasses 4, 5, 6 and 7 receive *additional* value from this element of the settlement. The members of the other three subclasses either already have received or will receive such information as a result of service actions that either they already have been informed of or will be informed of as a result of the settlement.”) (Italics in the original.)

17. The \$55.3 million figure represents past and expected future payments by Volkswagen to dealers to perform the necessary work for the service actions. Dr. Eads does not explain whether this is equal to the retail price that would be charged by dealers to vehicle owners/lessees for the preventative service.

total of \$24.5 million in the form of avoided expected future repair costs and an additional \$24.1 million in the form of avoided future diminution in value.¹⁸ He then adds both of these figures to the up-front cost of the preventative measures for Subclasses 1, 2 and 3 (\$55.3 million) to arrive at his valuation of the preventative measures for these three subclasses of \$103.9 million. See Table 1.

18. For Subclasses 4 through 7, the settlement provides for educational materials. However, Dr. Eads has no estimate of the up-front cost to Volkswagen of the provision of educational materials. Accordingly, the valuation of the benefit of preventative actions for these Subclasses is based solely on the avoided future repairs plus the avoided future diminution in value, which, as I now explain, represent an additional form of double-counting.

IV. DR. EADS LIKELY DOUBLE COUNTS THE VALUE OF FUTURE BENEFITS FROM THE PREVENTATIVE MEASURES OF THE SETTLEMENT

19. In addition to the double-counting described above, Dr. Eads' analysis likely falls prey to another important double-counting error. In particular, he values the future benefits conferred by the preventative measures of the settlement as the sum of the future repair costs and future value diminution that the preventative actions allow class members to avoid. This calculation assumes that repairing damage in the event of water ingress does nothing to mitigate the effects of the damage on vehicle values at resale.¹⁹

18. I address the double-counting in Dr. Eads' addition of the avoided future repair costs and the avoided future value diminution below in Section IV.

19. Under Dr. Eads' assumption that a water-damaged vehicle remains at a diminished value regardless of the repair, Dr. Eads overestimates the future value diminution avoided by the settlement. Under this assumption, once a vehicle suffers water ingress, its condition changes from "clean" to "rough" forever. Consequently, in calculating the expected future value diminution, Dr. Eads should remove from the

In other words, Dr. Eads assumes that there is some residual damage that diminishes the vehicle's value despite the fact that vehicle was repaired for damage caused by water ingress. Put yet another way, some damage from water ingress is simply irreparable.²⁰ This is a strong assumption, but neither Dr. Eads nor Mr. Hixenbaugh explicitly make this assumption or provide any analysis to support it.

20. The implication of Dr. Eads' and Mr. Hixenbaugh's unsupported assumption can be illustrated with a simple hypothetical example. Suppose a water ingress occurrence results in ankle-deep water in the passenger compartment of the car, and the "repair" involves draining out the water, while the damaged carpet, circuits, and everything else remain unrepaired. In this hypothetical circumstance, vehicles experiencing water ingress both require repair and suffer diminution to their value. This example is an extreme case where the avoided repairs (draining the car) and avoided diminution in value are completely "separable," and therefore can be added together, but it is precisely the unsupported assumption made by Dr. Eads and Mr. Hixenbaugh. Of course, in this example, I also assumed that the carpet and circuits cannot be repaired and bring to car to "as new" condition. Yet, it is clear that such repairs can be made.

21. Dr. Eads' estimate of the diminution in value relies on Mr. Hixenbaugh's estimates of differences in trade-in value of "otherwise clean vehicles and those that have

pool of cars susceptible to value diminution in any given year the set of vehicles that experienced water ingress in any prior year. Dr. Eads' incorrectly neglects to do this. See Appendix A.

20. Using the language of the Hixenbaugh Report, the assumption is that vehicles that suffer water damage remain in "rough" condition, regardless of whether they are ever repaired.

had water damage.”²¹ The assumption underlying Dr. Eads’ estimates, is that repair of the vehicles does not restore them to “clean” condition. An alternative to this unsupported assumption is that repair of water damage returns a vehicle to an average “clean” condition, which completely mitigates the supposed diminution in value. If this is the case, then the two measures of avoided harm (avoided repair costs and avoided diminution in value) are alternative ways of measuring the same thing, and should not be added together. Vehicles experiencing water ingress are either repaired and experience no diminution to their value, or are not repaired and are left in a “rough” state and suffer the concomitant diminution in resale value. In that case, the value of the future benefit conferred by the preventative measures is either the avoided future repair costs or the avoided diminution in value, but not both.

22. The extent to which repairs mitigate the impact of water ingress on vehicle value is a technical matter. I have reviewed the expert report of Robert Lange, Volkswagen’s expert on the technical aspects of vehicle valuation. Mr. Lange shows that repairs of water damage tend to mitigate all of the diminution in value due to that damage.²² In other words, according to Mr. Lange, standard repair of a vehicle following water ingress likely restores the vehicle to “clean” condition. Accordingly, Dr. Eads’ valuation of the settlement is further overstated to the extent that avoided future repair costs and avoided value diminution are double-counted.

21. Hixenbaugh Report, p. 1. Dr. Eads relies on data supplied by Mr. Hixenbaugh to measure the differences between trade-in values of “clean” and water-damaged vehicles. (Eads Report, p. 13.) Mr. Hixenbaugh provides a number of alternative estimates of these differences, and Dr. Eads selects one from that set.

22. Expert Report of Robert Lange, p. 2. Mr. Lange also states that Dr. Eads’ estimate of the avoided diminution in value, based on data provided by Mr. Hixenbaugh, is unreliable. See Expert Report of Robert Lange, ¶ 24.

V. ECONOMICALLY APPROPRIATE WAYS TO AGGREGATE COMPONENTS OF THE SETTLEMENT VALUATION

A. Elimination of Double-Counting

23. As I have shown, there are the two instances of double-counting in Dr. Eads' analysis: (1) the double-counting of up-front cost to Volkswagen of preventative actions (*i.e.*, service actions plus educational materials) and the avoided future losses from those preventative actions; and (2) the likely double-counting of the avoided future repair costs and the avoided future diminution vehicle resale values. The question then is what is the economically appropriate way to aggregate the values of the various categories of benefit from the settlement that Dr. Eads calculated?

24. The economic approach to valuation of the settlement benefits addresses the question of what costs (including diminution in value, if any) would be incurred by class members "but for" the settlement.²³ That is, how much loss would they sustain absent the settlement? Without the settlement, each class member would face a choice among these two plausible alternatives:

- Option 1: Pay the up-front cost for inspection, service, vehicle modification and educational information in order to avoid some future repair costs and/or diminution to the vehicle's value, or
- Option 2: Forego the up-front expense and, in the event that the vehicle does experience water ingress at some point in the future, incur the necessary repair and/or experience the diminution in value.

23. "But-for" analysis is typically done in the context of damages estimation. The question in damages is what would economic conditions (*e.g.*, prices, costs, profits) for plaintiffs be "but for" the alleged wrongful conduct? The "but-for" estimates of prices, costs or profits are then compared to actual prices, costs or profits to determine damages. Here we are valuing the settlement, not damages. So, the "but-for" question is, how would the pertinent economic conditions for the class members differ absent the settlement?

25. The settlement confers a benefit on the class members because Volkswagen pays for the up-front preventative measures, which in turn reduce the probability of water ingress in the future. *But for* the settlement, economically rational consumers would choose their preferred option, depending on each class member's expectation of the costs associated with each option, his or her perception of the probability of water ingress, his or her level of risk aversion, income, etc. Therefore, the value of the preventative provisions of the settlement to each class member is the cost associated with the option they would otherwise choose absent the settlement. That option is either to pay for up-front preventative measures or to incur losses due to water ingress in the future. It is plausible to assume that there are class members who are just indifferent between the two alternatives, and for these class members the value of the settlement is the same, irrespective of which option is used.

26. Table 2 shows a comparison of the two options, using figures from the Eads Report. The cost associated with Option 1 is simply the up-front cost to Volkswagen of the preventative measures. Dr. Eads estimates this amount to be \$55.3 million for Subclasses 1 through 3, but does not provide an estimate for Subclasses 4 through 7 because those Subclasses are not entitled to service actions under the Settlement. Class members owning vehicles in Subclasses 4 through 7 are entitled to educational materials only.

27. Table 2 also shows the cost associated with Option 2. This cost depends on whether (or the extent to which) repair of vehicles with water damage mitigates any diminution in value caused by water damage. If repair fully mitigates diminution in the resale value, then the total cost of option 2 is \$37.6 million for all Subclasses.

Alternatively, if repair does not mitigate value diminution at all (which Dr. Eads assumes), the cost of option 2 is the sum of the avoided repair cost and the avoided value diminution. Row [B] of Table 2 shows the result of this calculation, totaling \$77.3 million for all Subclasses.

28. According to Mr. Lange, the repair of water ingress damage from plenum or sunroof drain clogging generally eliminates the value diminution.²⁴ Therefore, based on Mr. Lange's analysis, the likely valuation of Option 2 is at the lower end of the range.

B. Computation of Total Valuation

29. Table 3 provides a summary of the economically meaningful total valuations of damages based on Dr. Eads' calculations. For purposes of Table 3, I assume that Dr. Eads' underlying calculations are correct.²⁵

30. As a preliminary matter, regardless of whether the settlement is valued based on up-front costs or avoided expected future losses, the valuation includes the estimate of Volkswagen's reimbursements for past damages. Dr. Eads estimates that figure to be \$1.5 million for Subclasses 1 and 2, and assumes that the figure is capped at \$8 million for the remaining Subclasses. Therefore, according to Dr. Eads, the total value of reimbursements is \$9.5 million.

24. There still may be individual cases where the water ingress damage is so severe that standard repairs do not fully mitigate the diminution in value. However, based on Mr. Lange's analysis, this would be a rare occurrence. Conversely, Dr. Eads and Mr. Hixenbaugh assume that in every case of water ingress, the water damage is so severe that despite the repairs, there is still a substantial diminution in value.

25. In Appendix A, I summarize my current assessment of some the assumptions and potential errors in Dr. Eads' analysis that may lead to overstatements in his calculations.

31. Basing the valuation on up-front cost only, the total valuation is the sum of up-front costs for Subclasses 1, 2 and 3 of \$55.3 million (See Table 1) plus the \$9.5 million reimbursement figure, for a total valuation of \$64.8 million.²⁶

32. Basing the valuation on avoided future losses, leads to a range of benefits depending on the extent to which repairs for water damage mitigate the diminution in vehicle value. As shown in Table 2, the estimate of avoided future losses ranges from \$37.6 million to \$77.3 million. Adding the \$9.5 million value for reimbursements to these figures provides a range from \$47.1 million to \$86.8 million. As noted above, Dr. Lange's analysis indicates that repair tends to mitigate value diminution, so the corrected value of the settlement, based on Dr. Eads' estimates, likely falls at the low end of this range, or \$47.1 million.

33. As I explain below in Appendix A, one error in Dr. Eads' calculations is his assumption of 100 percent take-up rate for the service actions and educational material. Based on data on Volkswagen's past service actions for water ingress, a more reasonable estimate of the take-up rate is 72.1 percent. Table 4 shows the effect of this assumption on the settlement valuation estimates. Assuming a 72.1 percent take-up rate, the valuation based on Volkswagen's up-front costs (Option 1) is \$49.4 million. The valuation based on avoided future losses (Option 2) ranges from \$36.6 million to \$65.2

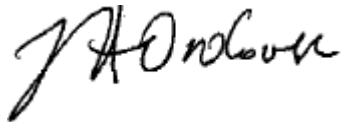
26. This figure does not include any up-front cost for Subclasses 4 – 7 because the settlement does provide for any service actions for the those Subclasses and Dr. Eads does not provide an estimate of the up-front cost of educational materials for those Subclasses. I understand that the up-front cost for educational material for Subclasses 4 – 7 would be relatively low because the educational material is identical to the educational material provided to Subclasses 1 – 3, which is subsumed in the \$55.3 million up-front cost figure. Therefore, the only additional cost not captured in Dr. Eads' figures is the incremental cost associated with printing and mailing educational material to class members owning or leasing vehicles in Subclasses 4 - 7.

million. However, based on Mr. Lange's analysis, and otherwise using Dr. Eads' approach, the adjusted value of the settlement based on avoided future losses likely is at the low end of the range, or \$36.6 million.

VI. CONCLUSION

34. Assuming that Dr. Eads' specific calculations of each component of the settlement benefits are correct, it is still the case that his analysis leads to significant overstatement in the aggregate measure of the valuation of the settlement. Most importantly, Dr. Eads makes an economic error when he adds together the up-front cost of preventative actions with estimates of the avoided future losses that would be eliminated as a result of those actions. Dr. Eads also provides no support for his extreme assumption that the avoided future repair costs should be added to the avoided diminution in value from water damage. Correcting these errors in Dr. Eads' analysis results in an aggregation of his valuation figures that is \$47.1 million, based on avoided future losses (and assuming that repairs fully mitigate diminution in value), and is \$64.8 million, based on Volkswagen's up-front costs. These figures reduce to \$36.6 million and \$49.4 million, based on a 72.1 percent take-up rate for the settlement's service actions and educational material.

35. Therefore, based on my current analysis, a reasonable value for Dr. Eads' valuation of the settlement is \$36.6 million or \$49.4 million, using a 72.1 percent take up rate.



June 10, 2010

Janusz A. Ordover

Date

Table 1
Dr. Eads' Valuation of Service Actions for Subclasses 1, 2 & 3

	Cost of Work to be Performed	Discounted Present Value of Avoided Future Repair Costs	Discounted Present Value of Avoided Value Diminution	Total
Service Actions P9 and P9/66C8 ¹	\$32,791,501	\$13,405,253	\$10,734,618	
Service Action JU ²	\$2,347,870	\$110,880	\$194,801	
Proposed New Service Action ³	\$20,155,221	\$10,936,681	\$13,217,591	
Total	\$55,294,592	\$24,452,814	\$24,147,010	\$103,894,416

Sources: 1 Eads Report, Table 8, p. 18
2 Eads Report, Table 9, p. 19
3 Eads Report, Table 7, p. 17

Table 2
Alternative Valuations of the Preventative Measures of the Settlement¹

	Subclasses 1 - 3	Subclasses 4 - 7	Total
Option 1: Pay for Preventative Measures, Avoid Possible Future Losses			
Cost of Option 1 (Up-Front Cost)	\$55,294,592	Not Provided	\$55,294,592
Option 2: Forego Preventative Measures, Incur Possible Future Losses			
Expected Future Repair Expense	\$24,452,814	\$13,108,887 ⁴	\$37,561,701
Expected Value Diminution	\$24,147,010	\$15,624,557 ⁴	\$39,771,567
Cost of Option 2 if Repair Mitigates 100% of Value Diminution ²	[A]		\$37,561,701
Cost of Option 2 if Repair Mitigates None of Value Diminution ³	[B]		\$77,333,268

Notes: 1 This table relies upon numbers provided by Dr. Eads.

2 If the "repair" returns a water-damaged vehicle to its average undamaged condition, owners of water damaged vehicles would choose between repairing their vehicle and letting its value diminish based on the cost associated with each alternative, so the expected cost of this option is the minimum of the expected value diminution and repair costs.

3 If the repair does not mitigate any of the value diminution, the expected cost of this option is the sum of the expected value diminution and repair cost.

4 See Eads Report, Table 6, p. 16

Table 3
Economically Appropriate Alternative Estimates of Dr. Eads' Valuation¹

	Value of the Preventative Measures ²	Value of Reimbursements ³	Total
Option 1: Pay for Preventative Measures, Avoid Possible Future Losses			
Cost of Option 1 (Up-Front Cost)	\$55,294,592	\$9,492,347	\$64,786,939
Option 2: Forego Preventative Measures, Incur Possible Future Losses			
Cost of Option 2 if Repair Mitigates 100% of Value Diminution	\$37,561,701	\$9,492,347	\$47,054,048
Cost of Option 2 if Repair Mitigates None of Value Diminution	\$77,333,268	\$9,492,347	\$86,825,615

Notes: 1 This table relies upon numbers provided by Dr. Eads.
2 See Table 2.
3 See Footnote 5.

Table 4
Economically Appropriate Alternative Estimates of Dr. Eads' Valuation
Assuming a 72.1 Percent Take-up Rate¹

	Value of the Preventative Measures ²	Value of Reimbursements ³	Total
Option 1: Pay for Preventative Measures, Avoid Possible Future Losses			
Cost of Option 1 (Up-Front Cost)	\$39,867,401	\$9,492,347	\$49,359,748
Option 2: Forego Preventative Measures, Incur Possible Future Losses			
Cost of Option 2 if Repair Mitigates 100% of Value Diminution	\$27,081,986	\$9,492,347	\$36,574,333
Cost of Option 2 if Repair Mitigates None of Value Diminution	\$55,757,286	\$9,492,347	\$65,249,633

Notes: 1 This table relies upon numbers provided by Dr. Eads.

2 Equals 72.1% (the weighted average take-up rate for the P9, P9/66C8 and JU service actions) of the values provided in Table 3.

3 See Footnote 5.

APPENDIX A: QUESTIONABLE ASSUMPTIONS AND POTENTIAL ERRORS IN DR. EADS' CALCULATIONS OF HIS VALUATION CATEGORIES

1. In this Appendix, I summarize my current analysis of the specific calculations provided by Dr. Eads. There are numerous assumptions and calculations contained in his spreadsheets, which I received on June 4, 2010. My work in this area is ongoing and I may supplement this report with future information as my work develops.

A. Dr. Eads Overstates the Take-up Rate of the Settlement Provisions, Leading to an Overstatement of the Value of the Settlement

2. Dr. Eads assumes a 100 percent take-up rate for all of the provisions of the settlement. That is, he assumes that 100 percent of eligible class members will bring their vehicle in for the service provided in the settlement, 100 percent of eligible class members will read and act on the information provided about preventative maintenance, and 100 percent of eligible class members will file claims for reimbursement. Dr. Eads provides no support for these assumptions which may be overstated for a number of reasons.

3. First, one would not expect a 100 percent take-up rate because take-up requires consumers to take potentially costly actions, such as taking the time to bring the vehicle in for service, reading and understanding the educational information, and performing the preventative maintenance on their vehicles. I understand that the Class Action Fairness Act of 2005 says that courts should use actual take-up rate rather than 100 percent to value coupon provisions of a settlement to the class for the purpose of calculating attorney's fees, and this is the same sort of provision.¹

1. This Act instructs courts to "award attorneys' fees to class counsel based only on the

4. Second, experience from the previous (2007 and 2008) service actions indicates that we should expect less than 100 percent take up of the service action provisions. For the P9 and P966C8 service actions, 71 percent of the eligible vehicles had responded to service action as of May 2010.² For the JU service action, 77.6 percent of eligible vehicles had responded as of May 2010.³ The weighted average of these two actual response rates is 72.1 percent.⁴

B. Dr. Eads Provides No Benchmark for the Incidence of Water Ingress Absent the Alleged Defects

5. Dr. Eads' calculations of avoided repair cost and avoided value diminution rely on his estimates of the incidence of water ingress given the alleged defects. These estimates range from 0.03 percent to almost one percent per year. Dr. Eads' valuations assume that preventative actions pursuant to the settlement reduce the incidence of water ingress to zero. Dr. Eads provides no basis for this assumption and ignores the fact that vehicles have a non-zero probability of experiencing water ingress even absent the alleged defects. Accordingly, Dr. Eads' assumption leads to an overstatement of his valuation figures.

coupons redeemed by the class, not the coupons distributed to the class" in the case of non-pecuniary ("coupon") awards. [Coffee (2010), footnote 58, p.307.]

2. Eads Report, p. 10.

3. Eads Report, p. 10.

4. It is reasonable to conclude that the actual response rate for the vehicles in Subclasses 4, 5, 6 and 7, which only receive educational preventative maintenance information, is likely lower because they receive a mailing and do not necessarily bring their vehicle in for a service action.

C. **Dr. Eads' Calculation of Expected Future Diminished Value Contains an Error**

6. Dr. Eads' calculation of expected future diminished value is inconsistent with his assumption, described above, that repair of a water-damaged vehicle does not reverse diminishment to its value or return its condition from "rough" to "clean." Under this assumption, once a vehicle experiences water ingress, its condition changes from "clean" to "rough" and its value falls to reflect this. If repair does not return the vehicle to "clean" condition, the vehicle cannot change from "clean" to "rough" condition a second time. Consequently, in calculating the expected future value diminution, Dr. Eads should remove from the pool of cars susceptible to value diminution in any given year the surviving vehicles that were damaged in any prior year. For example, any surviving vehicle that had water ingress-related damage repaired under warranty should be removed from the population of cars susceptible to value diminution, because all such vehicles are already in "rough" condition. Dr. Eads neglects to do this. Accordingly, in his calculation of expected future value diminishment, vehicles can change from "clean" to "rough" condition multiple times.

Exhibit 1

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EDUCATION

1968-1973 Columbia University, New York, New York
Graduate Department of Economics and European Institute of the School of International Affairs
Doctoral Dissertation: Three Essays on Economic Theory (May 1973). Ph.D 1973.

1967-1968 McGill University, Montreal, Canada
Departments of Economics and Political Science

1963-1966 Warsaw University, Warsaw, Poland
Department of Political Economy. B.A. (equiv.), 1966.

HONORS

1973 Columbia University: Highest distinction for the doctoral dissertation

1971-1972 Columbia University: Honorary President's Fellow

1969-1971 Columbia University: President's Fellow

1967-1968 McGill University: Honors Student

1964, 1965 Warsaw University: Award for Academic Achievement, Department of Political Economy

Who's Who in the World
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PROFESSIONAL EXPERIENCE

June 1982 - Professor of Economics
present Department of Economics, New York University, New York, New York

Sept. 1996 - Director of Masters in Economics Program
Aug. 2001 Department of Economics, New York University, New York, New York

Summer 1996- 2000	Lecturer International Program on Privatization and Reform Institute for International Development, Harvard University, Cambridge, Massachusetts
Aug. 1991 - Oct. 1992	Deputy Assistant Attorney General for Economics Antitrust Division United States Department of Justice, Washington, D.C.
Sept. 1989 - July 1990	Visiting Professor of Economics School of Management, Yale University, New Haven, Connecticut
	Lecturer in Law Yale Law School
Mar. 1984 - June 1988	Visiting Professor of Economics Universita Commerciale "Luigi Bocconi", Milan, Italy
June 1982 - Feb. 1985	Director of Graduate Studies Department of Economics, New York University
Sept. 1982 - June 1986	Adjunct Professor of Law (part-time) Columbia University Law School, New York, New York
Feb. 1982 - June 1982	Acting Director of Graduate Studies Department of Economics, New York University
June 1978 - June 1982	Associate Professor of Economics Department of Economics, New York University
Sept. 1979 - May 1990	Lecturer in Economics and Antitrust New York University Law School
Sept. 1977 - June 1978	Member, Technical Staff Bell Laboratories, Holmdel, New Jersey
	Associate Professor of Economics Columbia University
	Visiting Research Scholar Center for Law and Economics, University of Miami, Miami, Florida
Sept. 1973 - Aug. 1977	Assistant Professor of Economics New York University
Summer 1976	Fellow, Legal Institute for Economists, Center for Law and Economics, University of Miami
Summer 1976	Visiting Researcher Bell Laboratories, Holmdel, New Jersey

OTHER PROFESSIONAL ACTIVITIES

2006 - present	Special Consultant, Compass Lexecon (formerly Compass)/FTI Company, Washington, D.C.
2003 - 2006	Director, Competition Policy Associates, Inc. ("Compass"), Washington, D.C.
1997 – 1999	Consultant, Inter-American Development Bank, Washington, D.C.
1997 – present	Board of Editors, <i>Antitrust Report</i>
1995 – 2001	Consultant, The World Bank, Washington, D.C.
1998 – 2004	Senior Consultant Applied Economic Solutions, Inc., San Francisco, California
1995 - 2000	Senior Affiliate Cornerstone Research, Inc., Palo Alto, California
various	Testimony at Hearings of the Federal Trade Commission
1994 - 1996	Senior Affiliate Law and Economics Consulting Group, Emoryville, California
1994 - 2000	Senior Affiliate Consultants in Industry Economics, LLC, Princeton, New Jersey
1993 - 1994	Director Consultants in Industry Economics, Inc., Princeton, New Jersey
1992 - 1993	Vice-Chair (<i>pro tempore</i>) Economics Committee, American Bar Association, Chicago, Illinois
1990 - 1991	Senior Consultant
1992 - 1995	Organization for Economic Cooperation and Development, Paris, France
1991	Member <i>Ad hoc</i> Working Group on Bulgaria's Draft Antitrust Law The Central and East European Law Initiative American Bar Association
1990 - 1991	Advisor Polish Ministry of Finance and Anti-Monopoly Office Warsaw, Poland
1990 - 1991	Member Special Committee on Antitrust Section of Antitrust Law, American Bar Association
1990 - 1991	Director and Senior Advisor Putnam, Hayes & Bartlett, Inc., Washington, D.C.
1990 - 1996	Member

	Predatory Pricing Monograph Task Force Section of Antitrust Law, American Bar Association
1989	Hearings on Competitive Issues in the Cable TV Industry Subcommittee on Monopolies and Business Rights of the Senate Judiciary Committee Washington, D.C.
1989	Member EEC Merger Control Task Force, American Bar Association
1988 - present	Associate Member American Bar Association
1987 - 1989	Adjunct Member Antitrust and Trade Regulation Committee, The Association of the Bar of the City of New York
1984	Speaker, "Industrial and Intellectual Property: The Antitrust Interface" National Institutes, American Bar Association, Philadelphia, Pennsylvania
1983 - 1990	Director Consultants in Industry Economics, Inc
1982	Member Organizing Committee Tenth Annual Telecommunications Policy Research Conference, Annapolis, Maryland
1981	Member Section 7 Clayton Act Committee, Project on Revising Merger Guidelines American Bar Association
1980	Organizer Invited Session on Law and Economics American Economic Association Meetings, Denver, Colorado
1978 - 1979	Member Department of Commerce Technical Advisory Board Scientific and Technical Information Economics and Pricing Subgroup
1978 – present	Referee for numerous scholarly journals, publishers, and the National Science Foundation

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

American Economic Association
American Bar Association

PUBLICATIONS

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C. Book Chapters

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"Marginal Cost," in *Encyclopedia of Economics*, D. Greenwald (ed.), McGraw-Hill, 2nd ed. 1994, 627-630.

"Understanding Economic Justice: Some Recent Development in Pure and Applied Welfare Economics," in *Economic Perspectives*, M. Ballabon (ed.) Harwood Academic Publishers, vol. 1, 1979, 51-72.

"Problems of Political Equilibrium in the Soviet Proposals for a European Security Conference," in *Columbia Essays in International Affairs*, Andrew W. Cordier (ed.) Columbia University Press, New York, 1971, 1951-197

D. Other Publications

"The Economics of Price Discrimination," with Doug Fontaine and Greg Shaffer, in *The Economics of the Internet, The Vodafone Policy Paper Series*, No. 11, April 11, 2010, 27-51.

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"Regulation of Credit Card Interchange Fees and Incentives for Network Investments," with Y. Wang, Competition Policy Associates WP, Washington D.C. September 2005.

"Economics, Antitrust and the Motion Picture Industry," C.V. Starr Center Policy Paper, July 1983.

"On Bargaining, Settling, and Litigating: A Problem in Multiperiod Games With Imperfect Information," with A. Rubinstein, C.V. Starr Working Paper, December 1982.

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"Should We Take Rights Seriously: Economic Analysis of the Family Education Rights Act," with M. Manove, November 1977.

"An Echo or a Choice: Product Variety Under Monopolistic Competition," with A. Weiss; presented at the Bell Laboratories Conference on Market Structures, February 1977.

GRANTS RECEIVED

Regulation and Policy Analysis Program, National Science Foundation, Collaborative Research on Antitrust Policy, Principal Investigator, July 15, 1985 - December 31, 1986.

Regulation of Economic Activity Program, National Science Foundation, Microeconomic Analysis of Antitrust Policy, Principal Investigator, April 1, 1983 - March 31, 1984.

Economics Division of the National Science Foundation, "Political Economy of Taxation," Principal Investigator, Summer 1982.

Sloan Workshop in Applied Microeconomics (coordinator), with W.J. Baumol (Principal Coordinator), September 1977 - August 1982.

Economics Division of the National Science Foundation, "Collaborative Research on the Theory of Optimal Taxation and Tax Reform," July 1979 to September 1980, with E.S. Phelps.

Division of Science Information of the National Science Foundation for Research on "Scale Economies and Public Goods Properties of Information," W.J. Baumol, Y.M. Braundstein, M.I. Nadiri, Fall 1974 to Fall 1977.

National Science Foundation Institutional Grant to New York University for Research on Taxation and Distribution of Income, Summer 1974.

May 2010

**Expert Testimony Provided by
Dr. Janusz A. Ordover 2003 – 2010**

In Re: Gemstar Development Corporation Patent Litigation, MDL-1274-WBH (N.D. Ga.) (deposition testimony)

College Loan Corporation v. SLM Corporation, Sallie Mae, Inc., and Sallie Mae Servicing L.P., Civil Action No. 02-1377A (E.D. Va.) (deposition testimony)

Aventis Environmental Science et al., v. Scotts Company and Monsanto Co., 99 Civ. 4015 (LAP) (S.D. NY) (deposition testimony)

The Citizenship of DHL Airways, Inc. under 49 USC 40102 (a) (15), U.S. Department of Transportation Docket 13089 (trial testimony)

United States of America, et al., v. First Data Corporation and Concord EFS, Inc., 1:03CV02169 (RMC) (pre-trial testimony, deposition testimony)

Carolyn Fears, et al., v. Wilhelmina Model Agency, Inc., et al., U.S. Dist. Court, S.D.N.Y., Case No. 02-CV-4911 (HB)(HBP) (deposition testimony)

CSC Holdings, Inc. v. Yankee Entertainment and Sports Network, LLC, American Arbitration Assoc. (February 2004) (deposition testimony)

Masimo Corporation v. Tyco Health Care Group L.P. and Mallinckrodt, Incorporated, No. CV 02-4440 MRP, (C.D. Ca.), (deposition testimony and trial testimony in 2005, deposition and trial testimony in 2006, trial testimony in 2007)

Qantas Airways Ltd. and Air New Zealand Ltd. v. ACCC, (The Australian Competition Tribunal, Sydney, Australia) (tribunal testimony)

GE v. Commission, (Case T-210/01) (The Court of First Instance, Luxembourg) (Testimony for the Commission of the European Communities) (Testimony at the Hearing for UTC In re GE/Honeywell Merger, European Commission, Brussels, Belgium)

Sony/BMG Joint Venture (Case No. Comp/M3333) (Oral hearing testimony at the EC, Brussels, Belgium)

In Re: Remeron Direct Purchaser Antitrust Litigation, Master Docket No.03-CV-85 (FSH)(New Jersey) (deposition testimony)

Qantas Airways Ltd. and Air New Zealand Ltd. v. NZ Commerce Commission (High Court of New Zealand, Auckland Registry Case CIV 2003 404 6590, Auckland, New Zealand) (Appeal hearing testimony)

Reading International, Inc., et al., v. Oaktree Capital Management, et al., No. 03 Civ. 1895, (S.D. NY), (deposition testimony)

Natural Gas Anti-Trust Cases I, II, III, & IV (J.C.C.P. Nos. 4221 through 00000), Superior Court of the State of California, County of San Diego (deposition testimony)

In Re: NCAA I-A Walk-On Football Players Litigation, U.S. Dist. Court, Western District of Washington at Seattle, Master File No. C-04-1254-C (deposition testimony in 2005 and 2006)

Canadian Lumber Trade Alliance, et al. v. United States, et al. and Coalition for Fair Lumber Imports Executive Committee, et al. Consolidated Court No. 05-00324 (U.S. Court of International Trade) (deposition and trial testimony)

Jame Fine Chemicals, Inc. v. Hi-Tech Pharma Co., Inc., v. Medpointe Inc., U.S. Dist. Court, Dist. of New Jersey, Civ. Action No. 00-3545 (AEI) (deposition testimony)

Jason White, et al. v. NCAA, U.S. Dist. Court, Central District of California, No. CV06-0999 RKG (MANx) (deposition testimony)

In Re: Hydrogen Peroxide Antitrust Litigation, U.S. Dist. Court, Eastern District of Pennsylvania, Civ. Action No. 05-DV-666 (MDL No.:1682) (deposition testimony)

Rochester Medical Corp. v. C.R. Bard International et al., U.S. Dist. Court, E.D. of Texas (Texarkana Div.), No. 504-CV-060 (deposition testimony)

Natchitoches Parish Hospital et al. v. Tyco International, Ltd. et al., U.S. Dist. Court, District of Massachusetts, Civ. Action No. 05-12024 PBS (deposition testimony twice, court hearing, jury trial testimony)

In the Matter of Adjustment of Rates and Terms for Preexisting Subscription Services and Satellite Digital Audio Radio Services, Docket No. 20006-1 CRB DSTRA, Copyright Royalty Board, Library of Congress, Washington, D.C. (deposition testimony, hearing testimony)

Allied Orthopedic Appliances, Inc. v. Tyco Health Care Group L.P. et al., U.S. Dist. Court, Central District of California (Western Div.), CV-05-6419 MRP (AJWx) (deposition testimony twice)

Delco LLC and Edward Decker v. Giant of Maryland LLC, Wakefern Food Corp., and Stop & Shop Supermarket Company LLC, U.S. Dist. Court, District of New Jersey (Camden Vicinage), No. 07-CV-03522 (JBS-AMD) (deposition and PI hearing testimony)

Woolworths Ltd. and The Warehouse Group v. The Commerce Commission, High Court of New Zealand, Wellington Registry, CIV 2007-485-1255 (hearing on the appeal from the determination of the NZ Commerce Commission)

IGT v. Alliance Gaming et al., U.S. Dist. Court, Dist. of Nevada, No. CV-S-04 (1676-RCJ-(RJJ)) (deposition testimony)

In Re: New Motor Vehicle Canadian Export Antitrust Litigation, MDL Docket No. 03-md-1532-P-H (All Cases) (deposition testimony)

The European Commission Case Comp. 39.188 Bananas, European Commission, Brussels, Belgium (Oral Hearing testimony)

The European Commission Case Comp. 37.990 Intel, European Commission, Brussels, Belgium (Oral Hearing testimony)

Appeal No. 25: PCCW versus Telecommunications Authority, In the Telecommunications (Competition Provisions) Appeal Board, Hong Kong (Testimony)

Michael Siegel et al., v. Shell Oil Co., et al., U.S. District Court, Northern District of Illinois, Eastern Div., No. 06 C 0035 (deposition testimony)

The Commerce Commission v. Telecom Corp. of New Zealand Ltd., High Court of New Zealand, Auckland Registry, Civ. 2004-404-1333 ("hot tub" testimony)

Daniels Shapsmart Inc., Plaintiff, v. Tyco International, (US) Inc., and Tyco Healthcare Group, L.P., Defendants, U.S. District Court, Eastern District of Texas, Texarkana Division, No. 5:05-CV-169 (deposition testimony)

FTC v. CCC Holdings, Inc., et al, U.S. District Court for the District of Columbia, CA 08-2043 (deposition and trial testimony)

Rambus Inc. v. Micron Technology, Inc. et al., Superior Court of the State of California, County of San Francisco, Case No. 04-431105 (deposition testimony)

In The Matter of Herring Broadcasting, Inc. d/b/a Wealth TV vs. Bright House Networks, LLC and Cox Communications, Inc., Federal Communications Commission, Washington, DC, File Nos. CSR-7709-P, 7822-P, 7829-P, 7907-P. (deposition testimony, FCC hearing testimony)

In the matter of Rubber Chemicals Antitrust Litigation: Bridgestone Americas Holdings, Inc., et al v. Chemtura Corp., et al, U.S. District Court, Northern District of California, Individual Case No. C 06-5700-MJJ (testimony in an arbitration hearing)

International Business Machines v. T3 Technologies, Inc., U.S. District Court, Southern District of New York, Civ. Action No. 06-cv-13565-LAK (deposition testimony)

In the matter of BP America Production Company v. Repsol YPF, S.A., Arbitration under the Uncitral Arbitration Rules (testimony in an arbitration hearing)

Tessera Technologies, Inc. v. Hynix Semiconductor, Inc., Case No. 106CV-07668, Sup. Ct. of the State of California, County of Santa Clara (deposition testimony)

In Re: TFT-LCD (Flat Panel) Antitrust Litigation, U.S. Dist. Court, N.D. of California, No. M 07-1827 SI, MDL No. 1827

Enron Coal Services Ltd. And English Welsh and Scottish Railway Ltd., In the Competition Appeal Tribunal (London, U.K.), Case No. 1106/5/7/08 (testimony in the Hearing)

Geoffrey Pecover, et al v. Electronic Arts, Case No. C08-02820VRW, US Dist. Court, N.D. of CA, San Francisco Div. (deposition testimony)

Darren Berry, et al v. Volkswagen of America, Inc., Case No. 0516-CV01171-01, Cir. Court of Jackson County, Missouri at Independence (deposition testimony)

Ekaterini Kotaras, et al v. Whole Foods Market, U.S. Dist. Court, Dist. of Columbia, 1:08-cv-01832 - PLF

Exhibit 2

John M. Dewey, et al. vs. Volkswagen of America, Inc., et al.

Material Considered by Janusz A. Ordover

Fourth Amended Class Action Complaint, John M. Dewey, et al, vs. Volkswagen Aktiengesellschaft, et al, filed 07/30/2008.

Amended and Superseding Agreement of Settlement, John M. Dewey et al v. Volkswagen AG, et al., dated March 24, 2010.

Report of Dr. George C. Eads, Senior Consultant, CRA Charles River Associates, Inc.

Spreadsheets and other Back-up to Report of Dr. George C. Eads

Class Vehicle Chart 3-4-10.pdf

Report of Richard Hixenbaugh.

2249VWAG-0011164_P9_June_2008_Actionsheet.pdf

P9_Reimbursement Guidelines P9.pdf

P9 owner Letter US with photo.pdf

P9 Circular USA AND CANADA.pdf

P9 Announcement to Dealers English with FAQ.pdf

JU Dealer Letter US_FINAL.pdf

JU Circular US and CAN_FINAL.pdf

JU Campaign Customer Letter – US FINAL.pdf

JU Campaign Customer Renotification Letter – US FINAL.pdf

Transcript of June 25, 2007 deposition of Robert Cameron

Transcript of August 25, 2008 deposition of Robert Cameron

Transcript of January 28, 2009 deposition of Enrique Castro Gutierrez

Transcript of January 29, 2009 deposition of Enrique Castro Gutierrez

Transcript of October 2, 2008 deposition of Dieter Loersch

Transcript of November 6, 2008 deposition of Dieter Loersch

Transcript of November 7, 2008 deposition of Dieter Loersch

Transcript of November 12, 2008 deposition of Ulf Matte

Transcript of November 13, 2008 deposition of Ulf Matte

Transcript of November 14, 2008 deposition of Ulf Matte

Transcript of January 30, 2009 Deposition of Juergen Solloch, with exhibits

Transcript of March 3, 2009 Deposition of Juergen Solloch, with exhibits

Transcript of March 4, 2009 Deposition of Juergen Solloch, with exhibits

Transcript of March 5, 2009 Deposition of Juergen Solloch, with exhibits

Data

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Tom Bakos and Kiri Parankirinathan, "The Life Settlement Market is an Opportunity," *The Journal of Structured Finance*, Summer 2006, pp. 46-49.